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We claim:

1. A composition for use as a test meal in measuring total dietary fat absorption by the digestive tract of a subject, comprising a predetermined amount of dietary fat and a predetermined amount of a non-absorbable fat marker.

- 2. The composition according to claim 1 wherein the non-absorbable fat marker comprises sucrose polyester at up to 50% of the total of dietary fat and sucrose polyester, and preferably comprises sucrose behenate at up to 20% of the test meal, more preferably 0.1 to 10%, by weight.
- 3. The composition according to Claim 1, further comprising 5 to 60% dietary fat, 1 to 25% protein, and 5 to 60% carbohydrate, by weight.
- 4. The composition according to claim 1, further comprising a colorant, preferably selected from the group consisting of bromophenol blue, cresol green, beta-carotene, and carmine red, in a quantity sufficient to change the color of the fecal matter produced from the test meal, such that the sample collected from the subject is colored according to the colorant used.
- 5. A method for measuring total dietary fat absorption by the digestive tract of a subject, useful for diagnostic testing for diagnosing malabsorption of dietary fat by the digestive tract of the subject, and impairment of dietary fat digestion in the subject, comprising the steps of:
 - a. providing a test meal, preferably in liquid form, for consumption comprising an amount of dietary fat, preferably about 5 to 60% by weight, and an amount of a non-absorbable fat marker,
 - b. administering ingestion of the test meal by the subject,
 - c. collecting a sample of fecal matter from the subject at an interval following ingestion of said test meal,
 - d. measuring the amount of the dietary fat and the non-absorbable fat marker recovered in the fecal sample, and

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e. calculating the amount of dietary fat recovered from the test meal to determine the amount of dietary fat that was absorbed by the digestive tract of the subject.

- 6. The method according to Claim 5, wherein the provided test meal further comprises about 1 to 25% protein, and about 5 to 60% carbohydrate, by weight.
- 7. The method according to Claim 5 wherein the non-absorbable fat marker in the provided test meal comprises sucrose behenate at up to 20%, preferably 0.1% to 10%, by weight of the test meal.
- 8. The method according to Claim 5 wherein the collecting step comprises collecting the sample of fecal matter during the day following ingestion of the test meal, and preferably during each of the two consecutive days following ingestion of the test meal.
- 9. The method according to Claim 5 wherein the provided test meal further comprises a colorant, preferably selected from the group consisting of bromophenol blue, cresol green, beta-carotene, and carmine red, in a quantity sufficient to change the color of the fecal matter produced from the test meal, such that the sample collected from the subject is colored according to the colorant used.
- 10. A use of sucrose polyester comprising behenate fatty acid chains as a non-absorbable fat marker to determine total dietary fat absorption by the digestive tract of a subject, wherein the determination of total dietary fat absorption is used to diagnose malabsorption of dietary fat by the digestive tract, or to diagnose impairment of dietary fat digestion.